



Monday, February 17, 2020

Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Project ID: GULF CHELSEA TERMINAL 60597375-0500
SDG ID: GCF30939
Sample ID#s: CF30939 - CF30941

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

February 17, 2020

SDG I.D.: GCF30939

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client Id	Lab Id	Matrix
OUTFALL 003	CF30939	SW DISCHARGE
TRIP BLANK 1	CF30940	SW DISCHARGE
TRIP BLANK 2	CF30941	SW DISCHARGE



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Analysis Report

February 17, 2020

FOR: Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SW DISCHARGE
Location Code: AECOME-GULF
Rush Request: Standard
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

02/10/20
02/12/20

Time

16:00
16:06

Laboratory Data

SDG ID: GCF30939
Phoenix ID: CF30939

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: OUTFALL 003

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	02/13/20	MSF	EPA 1664
pH	7.85	1.00	pH Units	1	02/12/20 20:56	AP/KDB	SM4500-H B-11
Total Suspended Solids	34	5.0	mg/L	1	02/13/20	ARG	SM 2540D-11
Semi-Volatile Extraction	Completed				02/12/20	P/AK	SW3520C

Aromatic Volatiles w/Napthalene

Benzene	64	1.0	ug/L	1	02/12/20	MH	E624.1
Napthalene	46	1.0	ug/L	1	02/12/20	MH	E624.1

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	99		%	1	02/12/20	MH	70 - 130 %
% Bromofluorobenzene	94		%	1	02/12/20	MH	70 - 130 %
% Dibromofluoromethane	99		%	1	02/12/20	MH	70 - 130 %
% Toluene-d8	96		%	1	02/12/20	MH	70 - 130 %

Semivolatiles, PAH

Napthalene	20	3.8	ug/L	1	02/14/20	PS	E625.1
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QA/QC Surrogates

% 2-Fluorobiphenyl	61		%	1	02/14/20	PS	30 - 130 %
% Nitrobenzene-d5	75		%	1	02/14/20	PS	30 - 130 %
% Terphenyl-d14	21		%	1	02/14/20	PS	30 - 130 %

3

Semivolatiles by SIM, PAH

Benzo(a)pyrene	ND	0.1	ug/L	1	02/13/20	WB	E625.1
Napthalene	20	0.54	ug/L	1	02/13/20	WB	E625.1

QA/QC Surrogates

% 2-Fluorobiphenyl	69		%	1	02/13/20	WB	40 - 140 %
% Nitrobenzene-d5	71		%	1	02/13/20	WB	40 - 140 %
% Terphenyl-d14	35		%	1	02/13/20	WB	40 - 140 %

3

Client ID: OUTFALL 003

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

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Phyllis Shiller, Laboratory Director

February 17, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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Sample Information

Matrix: SW DISCHARGE
Location Code: AECOME-GULF
Rush Request: Standard
P.O.#: 112185

Custody Information

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Received by: CP
Analyzed by: see "By" below

Date

02/10/20

Time

16:06

02/12/20

Laboratory Data

SDG ID: GCF30939
Phoenix ID: CF30940

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: TRIP BLANK 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Aromatic Volatiles w/Napthalene</u>							
Benzene	ND	1.0	ug/L	1	02/12/20	MH	E624.1
Napthalene	ND	1.0	ug/L	1	02/12/20	MH	E624.1
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	106		%	1	02/12/20	MH	70 - 130 %
% Bromofluorobenzene	90		%	1	02/12/20	MH	70 - 130 %
% Dibromofluoromethane	102		%	1	02/12/20	MH	70 - 130 %
% Toluene-d8	93		%	1	02/12/20	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

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Phyllis Shiller, Laboratory Director

February 17, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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Analysis Report

February 17, 2020

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250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SW DISCHARGE
Location Code: AECOME-GULF
Rush Request: Standard
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

02/10/20

Time

16:06

02/12/20

Laboratory Data

SDG ID: GCF30939
Phoenix ID: CF30941

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: TRIP BLANK 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Aromatic Volatiles w/Napthalene</u>							
Benzene	ND	1.0	ug/L	1	02/12/20	MH	E624.1
Napthalene	ND	1.0	ug/L	1	02/12/20	MH	E624.1
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	106		%	1	02/12/20	MH	70 - 130 %
% Bromofluorobenzene	92		%	1	02/12/20	MH	70 - 130 %
% Dibromofluoromethane	100		%	1	02/12/20	MH	70 - 130 %
% Toluene-d8	96		%	1	02/12/20	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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Reviewed and Released by: Rashmi Makol, Project Manager



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QA/QC Report

February 17, 2020

QA/QC Data

SDG I.D.: GCF30939

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 518397 (pH), QC Sample No: CF30714 (CF30939)													
pH			7.38	7.40	0.30	98.2						85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 518435 (mg/L), QC Sample No: CF30854 (CF30939)													
Oil and Grease by EPA 1664A	BRL	1.4				98.0	97.0	1.0				85 - 115	20
Comment:													
Additional: MS acceptance range 75-125%.													
QA/QC Batch 518426 (mg/L), QC Sample No: CF30939 (CF30939)													
Total Suspended Solids	BRL	2.5	34	29	15.9	98.0						85 - 115	



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QA/QC Report

February 17, 2020

QA/QC Data

SDG I.D.: GCF30939

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 518304 (ug/L), QC Sample No: CF30716 (CF30939)										
<u>Semivolatiles by SIM, PAH</u>										
Benzo(a)pyrene	ND	0.02	65	66	1.5				40 - 140	20
Naphthalene	ND	0.50	57	52	9.2				40 - 140	20
% 2-Fluorobiphenyl	73	%	67	66	1.5				40 - 140	20
% Nitrobenzene-d5	71	%	64	62	3.2				40 - 140	20
% Terphenyl-d14	101	%	117	117	0.0				40 - 140	20

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 518455 (ug/L), QC Sample No: CF30726 (CF30939, CF30940, CF30941)

Volatiles


Benzene	ND	0.70	107	127	17.1	91	106	15.2	65 - 135	20
Naphthalene	ND	1.0	118	129	8.9	97	109	11.7	70 - 130	30
% 1,2-dichlorobenzene-d4	106	%	100	101	1.0	102	102	0.0	70 - 130	30
% Bromofluorobenzene	92	%	98	99	1.0	99	97	2.0	70 - 130	30
% Dibromofluoromethane	100	%	100	98	2.0	99	97	2.0	70 - 130	30
% Toluene-d8	102	%	101	106	4.8	99	103	4.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference


Phyllis Shiller, Laboratory Director
February 17, 2020

Monday, February 17, 2020

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCF30939 - AECOME-GULF

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CF30939	\$AECOM624-M	Naphthalene	MA / Client Specified Criteria / GULF CHELSEA TERMIN	46	1.0	5	5	ug/L
CF30939	\$AECOM624-M	Benzene	MA / Client Specified Criteria / GULF CHELSEA TERMIN	64	1.0	2	2	ug/L
CF30939	\$AECOMPAH-F	Naphthalene	MA / Client Specified Criteria / GULF CHELSEA TERMIN	20	3.8	5	5	ug/L
CF30939	\$AECOMPAH-S	Naphthalene	MA / Client Specified Criteria / GULF CHELSEA TERMIN	20	0.54	5	5	ug/L

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



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Analysis Comments

February 17, 2020

SDG I.D.: GCF30939

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

